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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,838	02/19/2002	Eric Albrand	21029/0240	8940
7590	11/10/2003			
EXAMINER				
LOPEZ, CARLOS N				
ART UNIT		PAPER NUMBER		
		1731		

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Applicati n No.</b>	<b>Applicant(s)</b>
	10/049,838	ALBRAND ET AL.
	Examin r Carlos Lopez	Art Unit 1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.  
 4a) Of the above claim(s) 7 and 8 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 1-6 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 19 February 2002 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.  
 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.  
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) The translation of the foreign language provisional application has been received.  
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____.<br> |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)     |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.<br> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

Figure 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: element 26 in figures 5 and 6. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claim 2 objected to because of the following informalities: grammatical error at line 22-23, "a ducts". Appropriate correction is required.

Claims 7-8 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims 7-8 have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1 "the glass ribbon" lacks antecedent basis.

In claim 4, "the cooling air on intake to annealing zone and on discharge from post-annealing zone" lacks antecedent basis.

Claim 5 recites temperatures sensors in the annealing and pre-annealing failing to distinctly claim which sensor is being referred to when using the term "the said temperature sensor". Is it the temperature sensor in the pre-annealing or annealing zone? Similar vagueness arises when using the terms "the said heat exchanger", and "the said regulator". Additionally, in claim 5, "the intake duct" at line 30, lacks antecedent basis.

As for claim 6, "the theoretical annealing curve" lacks antecedent basis.

For examination purposes "Flat glass annealing lehr equipped with controlled heating and cooling means comprising" is considered the preamble of the claim 1, wherein pre-annealing, annealing, and post-annealing zones are part of the claimed invention.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Vanaschen et al (US 5,125,948). Vanaschen discloses a lehr to provide controlled cooling of the glass sheet. The lehr includes pre-annealing, annealing and post-annealing zones D', C' and B' respectively as shown in figure 3. Each zone is equipped with cooling-air heat exchangers 96 situated above and below the glass plate, see figure 3. There is a single cooling-air intake manifolds 98 which are located where the zones D'- C' and C'-B' meet, see figure 3.

As for claim 3, the fan 70 draws air from the pre-annealing zone D, and annealing zone C as shown in figure 2.

As for claim 4, the system for controlling the temperature of the cooling air on intake to annealing zone C is deemed as heat exchanger 87 and thermocouple 88, and for the cooling air on discharge from the post annealing zone D is deemed as thermocouple 61 along with heat exchangers 76.

As for claim 5-6, as shown in figure 3 each zone includes a temperature sensor 107 and as disclosed by Vanaschen, the air-flow of each heat exchanger may be regulated by valve 95 (Col.5, lines 58-60). Additionally Vanaschen teaches that the temperature of each zone may independently be adjusted and regulated in an optimal manner (Col. 6, lines 3-8). Therefore, it is deemed that a temperature regulator would inherently be present in each zone as recited in claim 5 to regulate the temperature of the heat exchangers by varying the air-flow as controlled by valves 95.

As for claim 2, the zone c may be regarded as having the claimed pre-annealing, annealing and post annealing zones wherein the heat exchanger 96 is comprised of

sub-sections which are vertically divided, the subsections making a whole heat exchanger 96. It is noted that the designation of pre-annealing, annealing and post-annealing zones does not further structurally define a lehr or distinguish it from the prior art.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References B-M in page 1 and A-E in page 2 of PTO-892 have been cited to show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is (703) 605-1174 and after Dec. 18 2003 calls should be directed to (571) 272-1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (703) 308-1164 and after Dec. 18 2003 calls should be directed to (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

C.L

  
STEVEN P. GRIFFIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700